



Colorado Mineral Belt Revisited— An Analysis of New Data

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The three accompanying plates were presented as a poster session at the Geological Society of America's National meeting, October 29, 2002, in Denver, Colorado. The maps are based on digital data sets of geology, mining districts, and mineral deposits (extensively revised, edited, and corrected, unpublished data compiled by Wilson, 2002) overlain on the Proterozoic basement map of Colorado interpreted from aeromagnetic data by Sims and others (2001). All the maps were created in MapInfo, a GIS software program, and images of the maps were exported to Adobe Illustrator v.10. Adobe Acrobat Reader (downloadable free from www.adobe.com) is the only requirement for viewing the plates. Open GSA_poster_all.pdf and select the plates using the bookmarks, thumbnails, or page selection. To plot the maps at full-scale (3 ft X 4 ft) requires a large format plotter, but the plates may be resized to print on smaller paper.

Although much discussed in the literature, maps showing the detailed outline of the Colorado Mineral Belt are lacking. Lovering and Goddard (1950) show the geology and mines associated with the "Front Range mineral belt", and Sims and Tweto (1963) published the outline of the Colorado mineral belt as page-size illustrations. Based on detailed information on the location of the Tertiary intrusions and mineral deposits, and on the control provided by the Proterozoic structures, all superimposed using GIS data, a new outline of the Colorado Mineral Belt is proposed herein.

Plate 1 includes an index map showing the location of the Colorado Mineral Belt, the abstract text, and the map showing the Colorado Mineral Belt, Cretaceous-Tertiary intrusions and inferred batholiths, mineral districts, and metallic deposits that may be related to the Cretaceous-Tertiary intrusions.

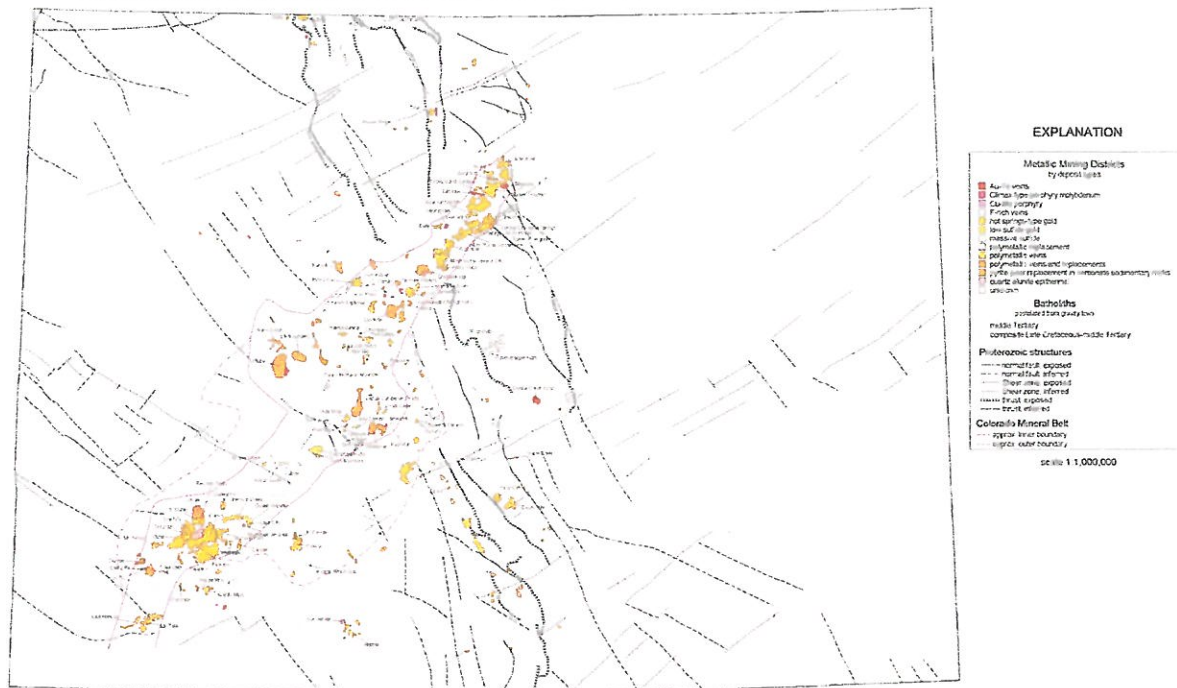
Plate 2 includes a simplified geologic map, explanation for the map shown on plate 1, conclusions, and references.

Plate 3 shows two maps, each with the Proterozoic rock units stripped away to better display the relationships of the Proterozoic structures to the Cretaceous-Tertiary intrusions and mineralization.

Acknowledgements:

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Colorado mineral belt, Proterozoic structures, inferred batholiths, and metallic mineral districts



Colorado mineral belt, Proterozoic structures, inferred batholiths, Cretaceous-Middle Tertiary intrusive rocks, and metallic mineral districts

